```
US-080-947-823-1

; Sequence 1, Application
; Sequent No. 6114605
; Patent NO. 601200:
; GENERAL INFORMATION:
; APPLICANT: Williams
                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-998-416-595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 658 base pairs
TYPE: nucleic acid
STPANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3556 aaaacaaaatggcacgacaataaaaaaagttttcacgcaaaattttcttggtgcgcagaa 3615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3496 aaatttagaaaaacgaagattattattagtaatgaaaagcgaagaaaactacgtaataa 3555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                          3916 taatatttagagtagtaat 3934
||| || || ||| ||||
196 TAAAGTTAATAGTGGTAAT 178
                                                                                                                                                                                                                                                                                                                                                                                                                          3856 taaatatatataataaagagtaaatttgtaattaaatgatataaaaagtattaaaataa 3915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3796 aggaaaatgatagtgtgacaactaaaaaagttgtatacaaccctgtcataggtttagaaa 3855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3736 atcaaaacaaagccttaatctaaaatttacaacacttttaacctttaaaaattaactttaaa 3795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3616 agttatatattaattaatttaatttcatttacttttttccctttttattttaagtta 3675
                                                                                                                                                                                                    PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                     554 AMANTAMATAMATAGAMATAGAMATAGCATATATATTATGTTCACAAAATACAATCTA 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ELEPHONE:
                                                                                         LICANT: Milligan, Stephen
LE OF INVENTION: Procedures and Materials for Conferring
LE OF INVENTION: Pest Resistance in Plants
SER OF SEQUENCES: 5
RESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      POLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               229;
                                                                                                                                                                                                                                                 , Application US/08947823 6114605
94111-3834
                             California
                                                       3: Townsend and Townsend and Crew LLF
Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                 Yaghoobi, Jai
Bodeau, John
                                                                                                                                                                                    Williamson, Valerie M.
Kaloshian, Isgouhi
Yaghoobi, Jafar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAG1408RP
                                              Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                919-541-8587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    595:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PF/5-30306/A/CGC1976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 82.2; DB 4;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 658;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2
```

```
δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                          ş
                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-947-823-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 1.9%;
Best Local Similarity 44.4%;
Matches 685; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (415) 576-03
TELEFAX: (415) 576-03
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            32127 ATTATATATAATGATGAAAAATTTAGAAGAATTCATACATCTCTGTACTTTTAAATTTG 32186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       32067 AAACCAAAAATATCTATTAAACATTTAGTAATTTTAATATTATTTAAGGGCGAAACAATT 32126
                                                                                                                                32364 AAAAT-TATTGCGTAAACATGTTTTTAATATTTGTTACAGAATATGACCAAAATTCGTAT 3242
                                                                                                                                                                                                                                                                                                          32304 GAACTTATTTAAAATAAATGTGTTTGAATAGTTAATATTTTATCCTAAAAATACTTTGA
                                                                                                                                                                                                                                                                                                                                                                                             32247 TTACAAACAATAACAAAGTGCTAAGCTTGTC---TTGACATGTTTTTGAAAGAAAAATTT
                                              32483 AAAAACAATAATAAAAGCTAAGTTTGTTTTGACATGTTTTTGAAGGAAATATTAAACAAA 3254
                                                                                                                                                                                                                                                                                                                                                                                                                       2727 gtaatteetttteaacategntaageacateacactaaaattaetttaaatagataaatt 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2667 atgttttgtgcattaccgagaggtcgaacatgatacacgcaagcatctaacctagtttg 2726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2613 atgtcactaaagaagaaaaaaattaacaagaattgtaa-----tatatttctttatgaa 2666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2553 tattaagataaataaaagagaactattttaaagaatataaaataaaatgtaacaaatg 2612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2493 accttcaaattaattaattccggaaaataataatcaacacccacacactgttttatgcata 2552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 51952 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 02:
REFERENCE/DOCKET NUMBER: 02:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
metrepax: (415) 576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US97/18802
FILING DATE: 09-OCT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/028,191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
                                                                          2847 aagttatttttagaaaataagtaatgaaaatttaattctaaaatttataacacttttatg 2906
                                                                                                                                                                                                                                                                                                                                               2787 agattcaattggatgacattaatttataatactctatccaaaattataactataaataaa 2846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patentin Rel
                                                                                                                                                                       2907 ctgtgtttgtttcgaagcatagaaaaataaaaagttattgttgggaatgaaaagtgaaga 2966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
3027 tttttcaaaatttacacttttatgatgtgtttgtttcgaagtgtagaaaaacgaaaagtt 3086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/947,823 FILING DATE: 09-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Bastian, Kevin
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MBER: US 60/028,191
10-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 82; DB 3;
Pred. No. 3.4e-06;
0; Mismatches 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                023070-070210US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 836;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 51952;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                          32363
                                                                                                                                                                                                                                                                                                                                                                                                3230
```

8

APPLICANT:

Philippsen,

ESULT 10 S-08-998-415-186/c Sequence 186, Application US/08998416 Patent NO. 6239264 GENERAL INFORMATION: B ş В B В Qγ Ъ Ş ДD ő Д 33493 AGCAAACTACAAACACATTATACTTAAGTTGAAGCAATAGAGA 33535 Ş 33433 AAATAAAAGTATTCTATTATCGAAGACAATAATGAAATGTATCAAAAAATTCACCAACAA 33492 33373 AGTGTTGTGGAAGTTAAAAATCAAGTTTTTAATAAATACTTTCAATATTAATACCAAAAT 33432 В ş 33193 TATATATATAACATTATGTCAATTCTTATTGTATATAGATACAAAATTGCTTTCGTGATA 33252 8 ş 3867 eataaagagtaaatttgtaattaaatgat--ataaaaagtattaaaataataatattta 3924 33313 33073 TGGGGGTAAGATTCAAAGTTTTCTTTCACGGCATGATAATTAGAGTGTAGTATAAAATTT 33132 3747 goottaalotaaaatttacaacacttttaacottaaaattaactttaaaaggaaaatgat 3806 3627 ttaattaattaattttcatttacttttttccctttttattttaaagttaaattattatta 3686 32956 AAGAAAATAAAAAATGAAAATG---TCAATATCAAAGGGCTTGAGAAATATAGAGGAAAA 33012 32896 TATTCAAATTCTAAGGAATATAAAAATACAAAATAAGAAATATGAGTAGTTAAAAAATA 32955 32776 TAATGTATTCATCAAAAGATTAAAAAAAAAAAAAATCAATTTTAAATAATAATATTTT 32835 3447 aaaaagtttttcacaaacttttttcacaaatttactatgtttatttcgaaatttagaaa 3506 32836 CTTGATATATATATGATAAACTATTTAACAGGGGAAAATTTGACAAGAAAAAATATTAA 32895 32717 ATAAAATTACATGACAAAGAAAAAAAAACAATGTTTGACTATTAAGAAATTAATG-ATTCGA 32775 3387 tattggtaatgaabagcgaagaaaccacataataaaaccaaaatggcacgacaatcaag 3446 32660 ATTATTGAAATAATCTTTAAAATGACGTA---TCAACATTTTTAATTAATTTGAAGAAAT 32716 3327 caaaatttataacattttcatgttgtgtttgtttcaaagcctagaaaaacgaagagttac 3386 32600 TTCTTATGTAAACATATGTTAATATTTGTTACAGAATATGACCACTAAATTCGTATCTTC 32659 3267 ccatgtaatgaaaacaaaatggcacgacaatcaaaaaagttttcacgcaaaattttctt 3326 3207 gtttgtttccgaggtatagaaaaacaaagaattagtgttggtaatgaaagtgaagaaaa 3266 32543 TTT---AAAATAAATGTGTTGAATAGTTAATATTTTGTTCCTAAAAACACTTTAAAGAA 32599 3147 aatoaaaaaaaagtttotacacacaaactttattcaaaatttacaacacttttatgttgtt 3206 atatcatgacaaatattttcaccgaaagatggaaagaacgaaa 4027 3087 attattggtaatgaaaagcgaagaaaatcacgtaataaaaacaaagcaaggatggcacgac 3146 aacgaagagttattattagtaatgaaaagcgaagaaaactacgtaatgaaaaacaaaatg 3566

δĀ δÃ Ъ γΩ 밁 δÃ DЪ ş Query Match 1.9 Best Local Similarity 48.6 Matches 287; Conservative 3943 atamanantgtggttgtccatatatcattattcactttananatatcatgacanatattt 4002 3766 ---aacaottttaacotttaaaattaactttaaaaggaaaatgatagtģtgacaactaaaa 3822 3707 attatttaaatataaaaaatataaccttaatcaaaaccaaagccttaatctaaaatttac- 3765 492 AATAAGAAATTAAAGTTAAAATTAATTATAATAATTCTTATAAAAAGTTAAATAATA 433 3647 tacttttttcccttttattttaaagttaaattattattatttcatttaaaatataaat 3706 1.9%; Score 81.8; DB 4; 48.6%; Pred. NO. 2.1e-06; vailve 0; Mismatches 297; Length 615; Indels 7; Ŋ

US-08-998-416-186

PAG1074RP linear

MOLECULE TYPE: I ORIGINAL SOURCE: ORGANISM: PAGI

DNA (genomic)

POPOLOGY

INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS.
LENGTH: 61.5 base pairs
TYPE: nucleic acid
STRANDEDNESS: single

186:

NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF.
TELECOMMUNICATION INFORMATION.
TELEPHONE: 919-541-8587

PF/5-30306/A/CGC1976

FILING DATE: 31-DEC 1996
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REFERENCE // CONTROL
RESERVENCE /

PRIOR APPLICATION DATA:
APPLICATION NUMBER: (

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatable
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
APPLICATION NUMBER: US/08/998,416
FILING DATE: 24-DEC-1997
CLASSIFICATION: 435

Page ø

APPLICANT: POhlmann, Rainer
APPLICANT: Steiner, Sabine
APPLICANT: Wohr, Christine
APPLICANT: Wendland, Jurgen
APPLICANT: Wendland, Jurgen
APPLICANT: Rebischung Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
NUMBER OF SEQUENCES: AND USES THEREOF

NRESSONDENCE ADDRESS:
ADDRESSE: NO. 6239264artis Corporation STREET: 3054 Cornwallis Road CITY: Research Triangle Park STATE: No. 6239264th Carolina

```
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Issued_Patents_NA:*

1: /ggn2_6/ptcdate/1/ina/5A_COMB.seq:*
2: /ggn2_6/ptcdate/1/ina/5B_COMB.seq:*
3: /ggn2_6/ptcdate/1/ina/6A_COMB.seq:*
4: /ggn2_6/ptcdate/1/ina/6B_COMB.seq:*
5: /ggn2_6/ptcdate/1/ina/backfiles1.seq:*
6: /ggn2_6/ptcdate/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    July 8, 2002, 20:09:27; Search time 84.83 Seconds (without alignments)
12445.276 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .ctgcacagactagcgtaaac 4298
                                                Sequence 1, Appli sequence 2, Appli sequence 3, Appli sequence 2, Appli sequence 2, Appli sequence 2, Appli sequence 3, Appli sequence 137, Appli sequence 16, Appli sequence 2, Appli sequence 2, Appli sequence 2, Appli sequence 2, Appli sequence 3, Appli sequence 3, Appli sequence 3, Appli sequence 4, Appli sequence 8, Appli sequence 8, Appli sequence 1, Appli sequence 1137, Appli sequence 1137, Appli sequence 1186, Appli sequence 186, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      767066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1

US-09-360-186-1/c

US-09-360-186-1/c

Sequence 1, Application US/09360186

Patent No. 626243

GENERAL INFORMATION:

APPLICANY: Staskawicz, et al.

TITLE OF INVENTION: B82 Resistance Gene
FILE REFERENCE: 50687

CURRENT APPLICATION NUMBER: US/09/360,186

CURRENT FILING DATE: 1999-07-23

EARLIER APPLICATION NUMBER: 60/093,957

NUMBER OF SEQ ID NOS:
SEQ ID NO 1

SEQ ID NO 1

LENGTH: 31491

ORGANISM: Capsicum annuum

US-09-360-186-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ο<sub>γ</sub>
                                                                                                       В
                                                                                                                                                           Ş
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                    Ъ
                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                      д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
5.8%; Score 248.4; DB 4;
Best Local Similarity 52.3%; Pred. No. 2.3e-35;
Matches 667; Conservative 0; Mismatches 598;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        00 0 000 0
                                                              24200 TTCAAAAATAGACCTTCGTTCGGGTTACCATCAGTTGAAAATTAGGGAGTCAGACATACC
                                                                                                                                                                                                                     24260
                                                                                                                                                                                                                                                                                                                                    24320
                                                                                                                                                                                                                                                                                                                                                                                                         24380 AGGTTTTATTCGTCCTACTGTTTCCCCATGGGGTACACCCGTGCTCCTTCGTGCGAAAGAA 24321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24440 TAGAATGGCTCCCCCCGCAACTAAAGGAGTTAAAGGAACAGCTAGCAGCTCCTAGACAA 24381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24500 GGAGATAGATTTTGGCATTGATGTTGCCAGACACTCATCCTATTTCTATTCCGCCATA 24441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O
                                                477
                                                                                                                                                                                                                                                                         357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             177 tagaaccaacccogaggaaacaaaggagatagaatcacaagttcaaagacttgttggagaa 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        117 9999atagaacatcaaattgactttataccggggggcaagcctaccaaataggcctcctta 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctccaaaattgaccttaaaagtggatatcaccaaattcgaatcaaggagggtgatgagtg 476
                                                                                                                                                                                                              taggcatocaatocoaaggottgacgatatgottgatgaattgcatgggtcaactotatt 416
                                                                                                                                                                                                                                                                                                                         agatggaaaatggcgtatgtgttgttgttgtagagcaatcaacaacaacatcaccatcaagta 356
                                                                                                                                                                                                                                                                                                                                                                                                                                               999tt999ttcaaaagagcctaagcccttgtgctgtacctgtcttgttggtgccaaaaaa 296
                                                                                                                                                                            TAAATATCCTCTTCCTAGGATTGATGACCTTTTTGACCAGCTTCAGGGTGCTAAGTGCTT
                                                                                                                                                                                                                                                                                          GGATGGGTCCCTTCGGATGTGCATAGACTACCGTCAGTTGAATAAGATCATGATTAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-316-083-2

US-08-67-106-2

US-08-94-731-2

US-09-316-083-2

US-09-316-075-1

US-09-316-075-1

US-08-883-795A-36

US-08-731-722-1

US-08-731-722-1

US-08-731-722-2

US-08-731-722-2

US-08-731-722-2

US-08-731-722-2

US-08-731-722-2

US-08-731-722-2

US-08-731-722-2

US-08-731-723-2

US-08-731-723-2

US-08-731-723-2

US-08-731-723-2

US-08-731-723-2

US-08-99-416-534

US-08-817-926-27

US-08-817-926-27

US-08-817-926-27

US-08-817-926-27

US-08-817-926-27

US-08-817-926-27

US-08-817-926-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 31491;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 1, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 34, Appli
Sequence 11, Appli
Sequence 17, Appli
Sequence 17, Appli
Sequence 17, Appli
Sequence 17, Appli
Sequence 18, Appli
Sequence 17, Appli
Sequence 18, Appli
Sequence 18, Appli
Sequence 19, Appli
Sequence 11, Appli
Sequence 11, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                               24201
                                                                                                                                                                                                                                                                                              24261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
```

Result No.

% Query Match

Length

DB IJ

SUMMARIES

Post-processing: Minimum Match 100% Maximum Match 100% Listing first 45 summaries

length: 0 length: 2000000000

hits satisfying chosen parameters:

383533 seqs, 122816752 residues

IDENTITY_NUC Gapext 1.0

tal number of

Title: Perfect score: Sequence:

US-09-724-857-1 4298

gcatgcactgccacaagtag......

table:

ş

nucleic

nucleic search, using sw model

GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen

იი

იი

8 9 10 11 11 12 13 14 15 15 16 17 17 18 19 20 20 21 22 23 23

```
23244 CCGACGCCCTCAGTAG 23229
                                                                                                                                                                                                                                                                   23304 AGCTTTTGAAAGACTATGATATGAGTCTGCATTACCATCCGGGCAAAGGCAAATATTGTAG 23245
                                                                                                                                                                                                                                                                                                                                  23364 AGAGTTTACAGTATGTTTTCTCACAGAAAGAATTAAACCTTAAGGCAGAGGCGTTGGATAG
                                                                                                                                                                                                                                                                                                                                                                                              23420 TAGAATCTGGAGGCACTATCTCTATGG----AGTCCATGTTGATATTTATACTGACCATA 23365
                                                                                                                                                                                                                                      1370 ccgatgctctttctag 1385
                                                                                                                                                                                                                                                                                             1310 aatttettgaacaattteettatgteateaaatacaagaaaagggageaceaatatagtgg 1369
                                                                                                                                                                                                                                                                                                                                                           1250 agtotttaaaatatttaaagggocaacacaagootcaataagagacatgotaaatggatgg 1309
                                                                                                                                                                                                                                                                                                                                                                                                                      1190 tamagacttggggaacactaccttgngtcocamagamatttggntatccatagtgatcacg 1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23900 TTCTAAGTGTAAATTCTGGTTATACGCTATTGACTTCCTGGGGCATATTGTGTCCAGTGA 23841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23840 CGGAATAAGAGTGGATCCCTAGAAAGTTGAAGTAGTGAGAAAAAGGCCTAGACCCACGAC 23781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23960 CACCAATCACCTCCGAATTATCCTTCAGACCCTTAAGGATTATCAACTATATGCCAAATT 23901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24080 GAGTAACGCCCCTGCAGCCTTCATGGATCTTATGAGTAGAGTGTTCCGTCAATTTATTGA 24021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24140 CAAGACAGCCTTCCGAACCCGATATGGTCACTACAATTTTTAGTCATGTCCTTCGGGTT 24081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   777 99999tgcatgtagatcccgagaaaatcaaagccatccgcgagtggccaactccacaaaa 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          717 ggataagtgtaccttttgtgtagatagcgtagtctttttaggctttatagtaaaccaaaa 776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  657 totaagtcacottagggaagttottotagttottaggaaaaatagtottttttgocaatag 716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 597 taaatatgtagtagtttattttgatgatatcttagtatatagtaaaaccctagaagacca 656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               537 tactaacgctccaagtacattcatgaggcttatgaatcacaccttgagggattgtatagg 596
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGCATGAGTGCGATTACCCTACTCATGACTTGGAGTTAGCAGCCGTGGTGTTTGTACT 23421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTTGGTTGTGTATTGATGAAGCGTGGTAAGGTGATAGCTTATGCATCTAGGCAGTTAAA 23481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99t9ccaccct--cactaccccacctatgacaaagact---ctatgctcttgtgcgaccc 1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           - catagtgcggttttgttgcaaggtggacaccccttgcttattttagtgaaaaactccat 1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTGACCCTTCCCGAGGGTGTAGATAATTTTGTGGGTTTATTGTGATGTGTCCCGTATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cctatcttccaeatttttccaeacttttggagatagagtgtgatgcatcgggagtagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98atgaaaagcatgagcaagcctttcaaaggctaaaag-ctcactcaccaatgcacccat 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ttittctagcctagcttctcccttgaatgaacttgtaaaaaaagatgttgcattttgttg 956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rccaaccgarartrgaaaccirtrtgogritgocogograffacagaaggritcotagaaag 23721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tgtaagtgatgtgagaagttttcatgggttagctagcttctatagaaggtttgttcccaa 896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTGTTCGTCATTGTATTTATTGATAATATTCTGATCTATTCTAAGGGTAAAGAGGGATCA 23961
                                                                                                                                                                                                                                                                                                                                    23305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23661
                         Ş
                                                                                  δÃ
                                                        밁
                                                                                                                   В
                                                                                                                                              δõ
                                                                                                                                                                                 В
                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-487-826B-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 2.4%;
Best Local Similarity 42.8%;
Matches 866; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (619) 235-8550
TELEFAX: (619) 235-0176
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 19124 base pairs
TYPE: nucleta acid
STRANDEDNESS: SIN91e
TOPOLOGY.
                               2345 taaaaaattattaaacaatgaatttttt-----tggaaattaatataaaacttagac 2396
                                                                                           2225 aaaacatcattcaagttttgtataacactgtgacgttaaccagttaaaataagaaaatca 2284
                                                                                                                                                                                                                                                    2165 tatttettttocatetagatgetetgtaettttetteagttgaaattteeaeteteeaae 2224
                                                                                                                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: cDNA HYPOTHETICAL: NO ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                        2045 aagtaaaaagtatttgttctagattattatgagtatatacttåctttctgtatttcattt 2104
                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Israelsen, Ned REGISTRATION NUMBER: 29,655
REFERENCE/DOCKET NUMBER: NIH121.001CP1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY disk
COMPUTER: IBM PC COMPOTER: OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIAN Release #1.0, Version
APPLICATION NUMBER: US/08/487,826B
FILING DATE: 10-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 10-SEP-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Su, Xin-zhaun
APPLICANT: Wellems, Thomas E.

TITLE OF INVENTION: BINDING EDWAINS FROM PLASMODIUM VIVAX
TITLE OF INVENTION: AND PLASMODIUM FALCIPARUM ERVIHROCYTE BINDING PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: 11
ADDRESSEE: Knobbe Martens Olson & Bear STREET: 620 Newport Center Drive 16th Floor STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 102.6; DB 2;
Pred. No. 7.4e-10;
0; Mismatches 1130;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 19124;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26; Gaps
```

6

RESULT
US-08-447-826B-13/c
; Sequence 13, Application US/08487826B; Patent No. 599387;
GENERAL INFORMATION:
APPLICANT: Sim, Kim L.
APPLICANT: Chitnis, Chetan
APPLICANT: Miller, Louis H.
APPLICANT: Miller, Louis H.
APPLICANT: Peterson, David S.

밁

₽ Ş 밁

₽ Ş 망 á Б δ Дb ρ В Ş ₽

23480

23600

1016

1076

23660

957

23720

897

837

õ D Qy ₽ Ş DЬ õ В Ş 밁

24020